

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP 03/14059A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 F04B51/00 F04B49/06

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 F04B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 209 076 A (IZON, INC.) 11 May 1993 (1993-05-11) column 1, line 57 -column 2, line 19 column 3, line 44 -column 4, line 58 column 5, line 13 -column 6, line 29 figures 1-4 ----	1,3,5
Y	US 6 448 982 B1 (SIEMENS ENERGY & AUTOMATION, INC.) 10 September 2002 (2002-09-10) column 1, line 26 - line 58 column 2, line 26 - line 29 column 4, line 3 - line 54 figures 2,3 ----	2,4
Y	----- -/-	2,4

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

## \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the international search

26 February 2004

Date of mailing of the international search report

08/03/2004

## Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl  
Fax: (+31-70) 340-3016

## Authorized officer

Gnüchtel, F

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP 03/14059

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 2 251 492 A (AIR TECHNOLOGY LIMITED) 8 July 1992 (1992-07-08) abstract claims 1-3 figures 1,2 ---	1,3,5
X	US 4 502 833 A (HITACHI, LTD.) 5 March 1985 (1985-03-05) column 1, line 6 - line 18 column 2, line 3 - line 34 column 3, line 59 -column 4, line 2 figures 1,2 -----	1,3,5

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No

PCT/EP 03/14059

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 5209076	A	11-05-1993	NONE		
US 6448982	B1	10-09-2002	US	2002198907 A1	26-12-2002
			US	2002194218 A1	19-12-2002
GB 2251492	A	08-07-1992	NONE		
US 4502833	A	05-03-1985	JP	1690731 C	27-08-1992
			JP	3057316 B	30-08-1991
			JP	58070078 A	26-04-1983